



April 29, 2011

Susan D. Mackert  
Environmental Specialist II  
VA Department of Environmental Quality  
Northern VA Regional Office  
13901 Crown Court  
Woodbridge, VA 22193



RE: Lake Anna Environmental Services, VA0072079

Dear Ms. Mackert

In response to your comment letter of April 4, 2011, we have made the following changes and are submitting these amendments to the permit application submitted March 7, 2011.

Permit Application Form 1

Section VII, SIC Codes: An SIC Code has been provided on the amended form.  
Section IX Indian Land: A response has been indicated on the amended form.  
Section XII. Nature of Business: A description has been provided on the amended form.  
Section XIII. Certification: Page 2 of Form 1 has been signed and dated.

Permit Application Form 2A

Part A.1. Facility Information: A corrected address has been provided on the amended form.  
Part A.4. Collection System: The population has been revised on the amended form.  
Part A.9.f. Outfall Description: The description has been revised and expanded in the Addendum. Form 2A now states the frequency and duration but references the Addendum for more detail.

VPDES Permit Application Addendum

Question 5. A registration statement is being submitted to the Central Office concurrent with this submittal. Question 5 has been amended to clarify flow frequency and duration

Section A.1.d: The zip code has been revised in the amended form.  
Section A.1.f: The flow rate has been revised to 0.020 MGD in the amended form.  
Section A.1.g: The population served of 160 is correct.  
Section A.2.b: The zip code has been revised and is provided in the amended form.  
Section A.9: The amended form has been re-certified.  
Section B.6.h: The letter strike has been revised to an "X" in the "No" box and is provided in the amended form.  
Section B.6.k: The letter strike has been revised to an "X" in the "Yes" box and is provided in the amended form.

Enclosed are the original and two copies of the amendments to the VPDES reissuance applications for the facility noted above. Please use these amended pages to replace the corresponding pages in the previously submitted application.

Three copies of the General Nutrient Permit Registration Statement are also included. The original is being sent to DEQ Central Office.

A copy of the amended forms are being forwarded to the Virginia Department of Health regional office in Lexington.

If you have any additional questions or comments, please feel free to contact me,

Sincerely,

A handwritten signature in black ink, appearing to read 'Arthur W. Nair', with a long horizontal flourish extending to the right.

Arthur W. Nair, P.E.  
Environmental Consultant  
Inboden Environmental Services, Inc.

CC: Carl Christiansen, VDH Lexington  
Alan Brockenbrough, DEQ  
Robert Propst



5790 Main Street  
Mt. Jackson, VA 22842

(540) 477-3300  
TOLL-FREE: (800) 648-1010  
FAX: (540) 477-3360  
WEB: [www.4ies.com](http://www.4ies.com)

March 7, 2011

Susan D. Mackert  
Environmental Specialist II  
VA Department of Environmental Quality  
Northern VA Regional Office  
13901 Crown Court  
Woodbridge, VA 22193



RE: Lake Anna Environmental Services, VA0072079

Dear Ms. Oakes

Enclosed are two VPDES reissuance applications for the facility noted above. Included in this package are:

Public Notice Billing Information  
VPDES/VPA Permit Billing Information Form for Annual Maintenance Fee  
EPA form 3510-2A Parts A and C  
VPDES Permit Application Addendum  
VPDES Sewage Sludge Permit Application Form, Pages 3 through 8  
Sludge Management Transportation Route diagram  
Location Map  
Wastewater Treatment Plant Piping Diagram  
Sludge Acceptance Request (email)  
9 VAC 25-31-530G Request Letter

A copy of the application is being forwarded to the Virginia Department of Health regional office in Lexington.

If you have any additional questions or comments, please feel free to contact me.

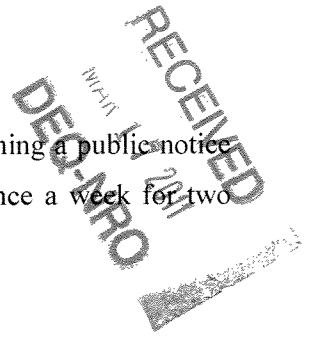
Sincerely,

Arthur W. Nair, P.E.  
Environmental Consultant  
Inboden Environmental Services, Inc.

CC: Carl Christiansen, VDH Lexington

**PUBLIC NOTICE BILLING INFORMATION**

I hereby authorize the Department of Environmental Quality to have the cost of publishing a public notice billed to the Agent/Department shown below. The public notice will be published once a week for two consecutive weeks in accordance with 9 VAC 25-31-290.C.2.



Agent/Department to be billed: Mr. Robert Propst

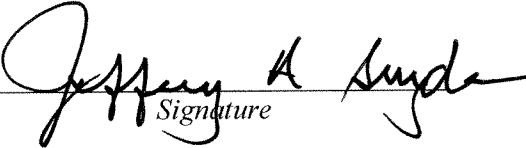
Owner: Lake Anna Environmental Services

Applicant's Address: 200 Lake Front Drive, Suite 103

Lake Anna, VA 23117

Agent's Telephone Number: (540) 894-8304

Authorizing Agent:

  
Signature

VPDES Permit No.: VA0072079

Facility Name: Lake Anna Family Campground STP

Please return to:

**Susan Mackert**

VA-DEQ, NRO

13901 Crown Court

Woodbridge, VA 22193-1453

Fax: (703) 583-3821

**VPDES/VPA Permit Billing Information Form  
for Annual Maintenance Fee**

**Facility Name:** Lake Anna Environmental Services STP

**Permit Number:** VA 0072079

**Tax Payer ID (Federal  
Identification Number):** 16-1686472

**Social Security Number if  
no Tax Payer ID:** \_\_\_\_\_

**Person / Organization to be  
billed:** Lake Anna Environmental Services

**Billing Address:** 200 Lake Front Drive, Suite 103

Lake Anna, VA 23117

**Billing Contact Name:** Robert Propst

**Title:** Site Supervisor

**Phone Number:** (540) 894-8304

**E-Mail Address:** bob@arctekonline.com

FORM 1 GENERAL		U.S. ENVIRONMENTAL PROTECTION AGENCY <b>GENERAL INFORMATION</b> Consolidated Permits Program (Read the "General Instructions" before starting.)		I. EPA I.D. NUMBER	
LABEL ITEMS		PLEASE PLACE LABEL IN THIS SPACE		GENERAL INSTRUCTIONS	
I. EPA I.D. NUMBER				If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (the area to the left of the label space lists the information that should appear), please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete items I, III, V, and VI (except VI-B which must be completed regardless). Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.	
III. FACILITY NAME					
V. FACILITY MAILING ADDRESS					
VI. FACILITY LOCATION					
II. POLLUTANT CHARACTERISTICS					
INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of <b>bold-faced terms</b> .					
SPECIFIC QUESTIONS		Mark "X"		SPECIFIC QUESTIONS	
		YES	NO	FORM ATTACHED	
A. Is this facility a <b>publicly owned treatment works</b> which results in a <b>discharge to waters of the U.S.</b> ? (FORM 2A)		X		X	
		16	17	18	
C. Is this a facility which currently results in <b>discharges to waters of the U.S.</b> other than those described in A or B above? (FORM 2C)			X		
		22	23	24	
E. Does or will this facility treat, store, or dispose of <b>hazardous wastes</b> ? (FORM 3)			X		
		28	29	30	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)			X		
		34	35	36	
I. Is this facility a proposed <b>stationary source</b> which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)			X		
		40	41	42	
B. Does or will this facility (either existing or proposed) include a <b>concentrated animal feeding operation</b> or <b>aquatic animal production facility</b> which results in a <b>discharge to waters of the U.S.</b> ? (FORM 2B)			X		
		19	20	21	
D. Is this a proposed facility (other than those described in A or B above) which will result in a <b>discharge to waters of the U.S.</b> ? (FORM 2D)			X		
		25	26	27	
F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)			X		
		31	32	33	
H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)			X		
		37	38	39	
J. Is this facility a proposed <b>stationary source</b> which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an <b>attainment area</b> ? (FORM 5)			X		
		43	44	45	
III. NAME OF FACILITY					
C 1 SKIP LAKE ANNA ENVIRONMENTAL SERVICES STP					
15 16 - 29 30 69					
IV. FACILITY CONTACT					
A. NAME & TITLE (last, first, & title)					
C 2 ROBERT PROPST, SITE SUPERVISOR					
15 16 45 46 48 49 51 52- 55					
B. PHONE (area code & no.)					
(540) 894-8304					
V. FACILITY MAILING ADDRESS					
A. STREET OR P.O. BOX					
C 3 200 LAKE FRONT DRIVE, SUITE 103					
15 16 45					
B. CITY OR TOWN					
C 4 LAKE ANNA					
15 16 40 41 42 47 51					
C. STATE					
VA					
D. ZIP CODE					
23117					
VI. FACILITY LOCATION					
A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER					
C 5 LAKE FRONT DRIVE					
15 16 45					
B. COUNTY NAME					
LOUISA					
46 70					
C. CITY OR TOWN					
C 6 LAKE ANNA					
15 16 40 41 42 47 51 52 -54					
D. STATE					
VA					
E. ZIP CODE					
23117					
F. COUNTY CODE (if known)					

CONTINUED FROM THE FRONT

## VII. SIC CODES (4-digit, in order of priority)

A. FIRST										B. SECOND									
7	4	9	5	2	(specify) Sewerage System including wastewater treatment and collection.					7					(specify)				
13	14	15	16	17						13	14	15	16	17					
C. THIRD										D. FOURTH									
7					(specify)					7					(specify)				
13	14	15	16	17						13	14	15	16	17					

## VIII. OPERATOR INFORMATION

A. NAME																									B. Is the name listed in item VIII-A also the owner?														
8 LAKE ANNA ENVIRONMENTAL SERVICES																									<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO														
C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box: If "Other," specify.)																									D. PHONE (area code & no.)														
F = FEDERAL					M = PUBLIC (other than federal or state)					P = PRIVATE					O = OTHER (specify)					(540) 894-8304																			
E. STREET OR P.O. BOX																																							
200 LAKE FRONT DRIVE, SUITE 103																																							
F. CITY OR TOWN																									G. STATE					H. ZIP CODE					IX. INDIAN LAND				
B LAKE ANNA																									VA					23117					Is the facility located on Indian lands? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO				

## X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water)															D. PSD (Air Emissions from Proposed Sources)														
9	N	VA0072079													9	P													
15	16	17	18												15	16	17	18											
B. UIC (Underground Injection of Fluid)															E. OTHER (specify)														
9	U														9		(specify)												
15	16	17	18												15	16	17	18											
C. RCRA (Hazardous Waste)															E. OTHER (specify)														
9	R														9		(specify)												
15	16	17	18												15	16	17	18											

## XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers, and other surface water bodies in the map area. See instructions for precise requirements.

## XII. NATURE OF BUSINESS (provide a brief description)

Lake Anna Environmental Services (LAES) owns and operates wastewater collection and treatment system serving 50 connections in the Lake Anna Plaza Area of Louisa County Virginia. LAES collects and treats sewage and charges a utility fee to its customers.

## XIII. CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)  
JEFFREY A. SNYDER, PRESIDENT

B. SIGNATURE

C. DATE SIGNED

*Jeffrey A. Snyder* 4/15/2011

## COMMENTS FOR OFFICIAL USE ONLY


**FACILITY NAME AND PERMIT NUMBER:**

Lake Anna Environmental Services STP VA 0072079

Form Approved 1/14/99  
OMB Number 2040-0086**BASIC APPLICATION INFORMATION****PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:****All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet.****A.1. Facility Information.**

Facility name Lake Anna Environmental Services STP

Mailing Address 200 Lake Front Drive, Suite 103, Lake Anna, VA 23117

Contact person Robert Propst

Title Site Supervisor

Telephone number (540) 894-8304

Facility Address Lake Front Drive, 600 feet north of intersection of Route 208  
(not P.O. Box) \_\_\_\_\_

**A.2. Applicant Information.** If the applicant is different from the above, provide the following:

Applicant name (same as above)

Mailing Address \_\_\_\_\_

Contact person \_\_\_\_\_

Title \_\_\_\_\_

Telephone number \_\_\_\_\_

**Is the applicant the owner or operator (or both) of the treatment works?**☒ owner ☒ operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

☒ facility ☒ applicant**A.3. Existing Environmental Permits.** Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

NPDES VA0072079 PSD \_\_\_\_\_

UIC \_\_\_\_\_ Other \_\_\_\_\_

RCRA \_\_\_\_\_ Other \_\_\_\_\_

**A.4. Collection System Information.** Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name	Population Served	Type of Collection System	Ownership
<u>Lake Anna Plaza</u>	<u>160</u>	<u>Separate</u>	<u>Private</u>
_____	_____	_____	_____
_____	_____	_____	_____
Total population served <u>160</u>			



## FACILITY NAME AND PERMIT NUMBER:

Form Approved 1/14/99  
OMB Number 2040-0086

Lake Anna Environmental Services STP VA 0072079

**A.5. Indian Country.**

- a. Is the treatment works located in Indian Country?

☐ Yes ☒ No

- b. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?

☐ Yes ☒ No**A.6. Flow.** Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal.

- a. Design flow rate
- 0.020
- mgd

	<u>Two Years Ago</u>	<u>Last Year</u>	<u>This Year</u>
b. Annual average daily flow rate	<u>0.018</u>	<u>0.017</u>	<u>0.018</u> mgd
c. Maximum daily flow rate	<u>0.021</u>	<u>0.020</u>	<u>0.051</u> mgd

**A.7. Collection System.** Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each.

☒ Separate sanitary sewer 100 %

☐ Combined storm and sanitary sewer \_\_\_\_\_ %

**A.8. Discharges and Other Disposal Methods.**

- a. Does the treatment works discharge effluent to waters of the U.S.?

☒ Yes ☐ No

If yes, list how many of each of the following types of discharge points the treatment works uses:

i. Discharges of treated effluent 1

ii. Discharges of untreated or partially treated effluent 0

iii. Combined sewer overflow points 0

iv. Constructed emergency overflows (prior to the headworks) 0

v. Other 0

- b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.?

☐ Yes ☒ No

If yes, provide the following for each surface impoundment:

Location: \_\_\_\_\_

Annual average daily volume discharged to surface impoundment(s) \_\_\_\_\_ mgd

Is discharge \_\_\_\_\_ continuous or \_\_\_\_\_ intermittent?

- c. Does the treatment works land-apply treated wastewater?

☐ Yes ☒ No

If yes, provide the following for each land application site:

Location: \_\_\_\_\_

Number of acres: \_\_\_\_\_

Annual average daily volume applied to site: \_\_\_\_\_ Mgd

Is land application \_\_\_\_\_ continuous or \_\_\_\_\_ intermittent?

- d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works?

☐ Yes ☒ No

**FACILITY NAME AND PERMIT NUMBER:**

Lake Anna Environmental Services STP VA 0072079

Form Approved 1/14/99  
OMB Number 2040-0086

If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).

\_\_\_\_\_

If transport is by a party other than the applicant, provide:

Transporter name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
\_\_\_\_\_

Contact person: \_\_\_\_\_

Title: \_\_\_\_\_

Telephone number: \_\_\_\_\_

For each treatment works that receives this discharge, provide the following:

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
\_\_\_\_\_

Contact person: \_\_\_\_\_

Title: \_\_\_\_\_

Telephone number: \_\_\_\_\_

If known, provide the NPDES permit number of the treatment works that receives this discharge. \_\_\_\_\_

Provide the average daily flow rate from the treatment works into the receiving facility. \_\_\_\_\_

mgd

- e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8.a through A.8.d above (e.g., underground percolation, well injection)?

\_\_\_\_\_ Yes

\_\_\_\_\_ ☒ No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable):

\_\_\_\_\_

Annual daily volume disposed of by this method: \_\_\_\_\_

Is disposal through this method

\_\_\_\_\_ continuous or \_\_\_\_\_ intermittent?

**FACILITY NAME AND PERMIT NUMBER:**

Lake Anna Environmental Services STP VA 0072079

Form Approved 1/14/99  
OMB Number 2040-0086**WASTEWATER DISCHARGES:**

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 **once for each outfall** (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

**A.9. Description of Outfall.**

- a. Outfall number 001
- b. Location Lake Anna 23117  
(City or town, if applicable) (Zip Code)  
Louisa VA  
(County) (State)  
38 Deg. 05 Min. North 77 Deg. 49 Min. West  
(Latitude) (Longitude)
- c. Distance from shore (if applicable) 1055 (approx.) ft.
- d. Depth below surface (if applicable) 55 (approx) ft.
- e. Average daily flow rate 0.020 mgd
- f. Does this outfall have either an intermittent or a periodic discharge? ✓ Yes        No (go to A.9.g.)
- If yes, provide the following information:
- Number of times per year discharge occurs: currently 15 to 17(see addendum)
- Average duration of each discharge: currently 5 days (see addendum)
- Average flow per discharge: currently 0.018 mgd
- Months in which discharge occurs: January-December
- g. Is outfall equipped with a diffuser?        Yes ✓ No

**A.10. Description of Receiving Waters.**

- a. Name of receiving water Lake Anna and North Anna River
- b. Name of watershed (if known) Unknown
- United States Soil Conservation Service 14-digit watershed code (if known): Unknown
- c. Name of State Management/River Basin (if known): York
- United States Geological Survey 8-digit hydrologic cataloging unit code (if known):
- d. Critical low flow of receiving stream (if applicable):  
acute        cfs chronic        cfs
- e. Total hardness of receiving stream at critical low flow (if applicable): N/A mg/l of CaCO<sub>3</sub>

## FACILITY NAME AND PERMIT NUMBER:

Lake Anna Environmental Services STP VA 0072079

Form Approved 1/14/99  
OMB Number 2040-0086

## A.11. Description of Treatment.

- a. What levels of treatment are provided? Check all that apply.

☐ Primary☒ Secondary☐ Advanced☒ Other.

Describe:

Second Stage Secondary, Effluent Polishing

- b. Indicate the following removal rates (as applicable):

Design BOD<sub>5</sub> removal or Design CBOD<sub>5</sub> removal92 %

Design SS removal

92 %

Design P removal

N/A %

Design N removal

N/A %Other Ammonia90 %

- c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.

Chlorination

If disinfection is by chlorination, is dechlorination used for this outfall?

☒ Yes☐ No

- d. Does the treatment plant have post aeration?

☐ Yes☒ No

**A.12. Effluent Testing Information.** All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 001

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	6.12	s.u.			
pH (Maximum)	8.7	s.u.			
Flow Rate	0.051	mgd	0.0175	mgd	240
Temperature (Winter)	11	deg C	4.6	deg C	35
Temperature (Summer)	22.4	deg C	19.4	deg C	10

\* For pH please report a minimum and a maximum daily value

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		

## CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.

BIOCHEMICAL OXYGEN DEMAND (Report one)	BOD-5	18	mg/L	2.2	mg/L	26	SM5210B	2
	CBOD-5							
FECAL COLIFORM		2	n/cmL	1	n/cmL	4	SM9222D	1
TOTAL SUSPENDED SOLIDS (TSS)		40	mg/L	6.7	mg/L	26	SM2540D	1

## END OF PART A.

**REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE**

**FACILITY NAME AND PERMIT NUMBER:**

Lake Anna Environmental Services STP VA 0072079

Form Approved 1/14/99  
OMB Number 2040-0086**BASIC APPLICATION INFORMATION****PART C. CERTIFICATION**

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:



Basic Application Information packet

Supplemental Application Information packet:

☐ Part D (Expanded Effluent Testing Data)☐ Part E (Toxicity Testing: Biomonitoring Data)☐ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)☐ Part G (Combined Sewer Systems)**ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title Jeff Snyder, PresidentSignature Telephone number (540) 894-8305Date signed 3/16/2011

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

**SEND COMPLETED FORMS TO:**

## VPDES Permit Application Addendum

1. **Entity to whom the permit is to be issued:** Lake Anna Environmental Services

*Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.*

2. **Is this facility located within city or town boundaries?** Yes ☐ No ☒

3. **Provide the tax map parcel number for the land where the discharge is located.** \_\_\_\_\_

4. **For the facility to be covered by this permit, how many acres will be disturbed during the next five years due to new construction activities?** 1 acre

5. **What is the design average effluent flow of this facility?** 0.020 MGD

**For industrial facilities, provide the max. 30-day average production level, include units:**

**In addition to the design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels?** Yes ☒ No ☐

If "Yes", please identify the other flow tiers (in MGD) or production levels:

0.099

*Please consider the following questions for both the flow tiers and the production levels (if applicable): Do you plan to expand operations during the next five years? Is your facility's design flow considerably greater than your current flow?*

### Current Conditions:

6. **Nature of operations generating wastewater:**

Residences and small commercial with domestic wastewater

100 % of flow from domestic connections/sources

Number of private residences to be served by the treatment works: 40 (primarily weekend use)

0 % of flow from non-domestic connections/sources

7. **Mode of discharge:** ☐ Continuous ☒ Intermittent ☐ Seasonal

Describe frequency and duration of intermittent or seasonal discharges:

15 to 17 discharges per year, each discharge lasting 5 days

### Tier 1 (0.020 MGD) at capacity

6. **Nature of operations generating wastewater:**

Residences and small commercial with domestic wastewater

100 % of flow from domestic connections/sources

Number of private residences to be served by the treatment works: 150 (primarily weekend use)

0 % of flow from non-domestic connections/sources

7. **Mode of discharge:** ☒ Continuous ☐ Intermittent ☐ Seasonal

Describe frequency and duration of intermittent or seasonal discharges:

***Tier II (0.099 MGD) at capacity***

**6. Nature of operations generating wastewater:**

Residences and small commercial with domestic wastewater

100 % of flow from domestic connections/sources

Number of private residences to be served by the treatment works: 300 (full time residency)

0 % of flow from non-domestic connections/sources

**7. Mode of discharge:** ☒ Continuous ☐ Intermittent ☐ Seasonal

Describe frequency and duration of intermittent or seasonal discharges:

**8. Identify the characteristics of the receiving stream at the point just above the facility's discharge point:**

       Permanent stream, never dry

       Intermittent stream, usually flowing, sometimes dry

       Ephemeral stream, wet-weather flow, often dry

       Effluent-dependent stream, usually or always dry without effluent flow

  X   Lake or pond at or below the discharge point

       Other: \_\_\_\_\_

9.

**Approval Date(s):**

**O & M Manual** July 21, 1994 **Sludge/Solids Management Plan** 2006 Permit Reissuance

Have there been any changes in your operations or procedures since the above approval dates? Yes ☒ No ☐

## VPDES SEWAGE SLUDGE PERMIT APPLICATION FORM

## SCREENING INFORMATION

This application is divided into four sections. Section A pertains to all applicants. The applicability of Sections B, C and D depends on your facility's sewage sludge use or disposal practices. The information provided on this page will help you determine which sections to fill out.

1. All applicants must complete Section A (General Information).

2. Does this facility generate sewage sludge? ☒ Yes ☐ No

Does this facility derive a material from sewage sludge? ☐ Yes ☒ No

If you answered "Yes" to either, complete Section B (Generation Of Sewage Sludge or Preparation Of A Material Derived From Sewage Sludge).

3. Does this facility apply sewage sludge to the land? ☐ Yes ☒ No

Is sewage sludge from this facility applied to the land? ☒ Yes ☐ No

If you answer "No" to all above, skip Section C.

If you answered "Yes" to either, answer the following three questions:

a. Does the sewage sludge from this facility meet the ceiling concentrations, pollutant concentrations, Class A pathogen reduction requirements and one of the vector attraction reduction requirements 1-8, as identified in the instructions?  
☐ Yes ☒ No

b. Is sewage sludge from this facility placed in a bag or other container for sale or give-away for application to the land?  
☐ Yes ☒ No

c. Is sewage sludge from this facility sent to another facility for treatment or blending? ☒ Yes ☐ No

If you answered "No" to all three, complete Section C (Land Application Of Bulk Sewage Sludge).

If you answered "Yes" to a, b or c, skip Section C.

4. Do you own or operate a surface disposal site? ☐ Yes ☒ No

If "Yes", complete Section D (Surface Disposal).



## SECTION A. GENERAL INFORMATION

*All applicants must complete this section.***1. Facility Information.**

- a. Facility name: Lake Anna Environmental Services STP
- b. Contact person: Robert Propst  
Title: Site Supervisor  
Phone: ( 540 ) 894-8304
- c. Mailing address:  
Street or P.O. Box: 200 Lake Front Drive, Suite 103  
City or Town: Lake Anna State: VA Zip: 23117
- d. Facility location:  
Street or Route #: Lake Front Drive, 600 feet north of intersection with Route 208  
County: Lousia  
City or Town: Lake Anna State: VA Zip: 23117
- e. Is this facility a Class I sludge management facility? Yes ☒ No
- f. Facility design flow rate: 0.020, 0.099\* mgd \*Tier II
- g. Total population served: 160
- h. Indicate the type of facility:  
☐ Publicly owned treatment works (POTW)  
☒ Privately owned treatment works  
☐ Federally owned treatment works  
☐ Blending or treatment operation  
☐ Surface disposal site  
☐ Other (describe): \_\_\_\_\_

**2. Applicant Information.** If the applicant is different from the above, provide the following:

- a. Applicant name: Lake Anna Environmental Services
- b. Mailing address:  
Street or P.O. Box: 200 Lake Front Dr., Suite 103  
City or Town: Lake Anna State: VA Zip: 23117
- c. Contact person: Mr. Robert Propst  
Title: Site Supervisor  
Phone: ( 540 ) 894-8304
- d. Is the applicant the owner or operator (or both) of this facility?  
☒ owner ☒ operator
- e. Should correspondence regarding this permit be directed to the facility or the applicant?  
☐ facility ☒ applicant

**3. Permit Information.**

- a. Facility's VPDES permit number (if applicable): VA0072079
- b. List on this form or an attachment, all other federal, state or local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices:
- | Permit Number: | Type of Permit: |
|----------------|-----------------|
| _____          | _____           |
| _____          | _____           |

FACILITY NAME: Lake Anna Env. Ser. STPVPDES PERMIT NUMBER: VA0072079

4. **Indian Country.** Does any generation, treatment, storage, application to land or disposal of sewage sludge from this facility occur in Indian Country?        Yes   X   No If "Yes", describe:

5. **Topographic Map.** Provide a topographic map or maps (or other appropriate maps if a topographic map is unavailable) that shows the following information. Maps should include the area one mile beyond all property boundaries of the facility:

- Location of all sewage sludge management facilities, including locations where sewage sludge is generated, stored, treated, or disposed.
- Location of all wells, springs, and other surface water bodies listed in public records or otherwise known to the applicant within 1/4 mile of the property boundaries.

6. **Line Drawing.** Provide a line drawing and/or a narrative description that identifies all sewage sludge processes that will be employed during the term of the permit including all processes used for collecting, dewatering, storing, or treating sewage sludge, the destination(s) of all liquids and solids leaving each unit, and all methods used for pathogen reduction and vector attraction reduction. (No processing at this facility.)

7. **Contractor Information.** Are any operational or maintenance aspects of this facility related to sewage sludge generation, treatment, use or disposal the responsibility of a contractor?   X   Yes        No

If "Yes", provide the following for each contractor (attach additional pages if necessary).

Name: Garth Septic Service

Mailing address:

Street or P.O. Box: 16545 Cox Mill Rd.

City or Town: Orange State: VA Zip: 22960

Phone: ( 540 ) 672-3361

Contractor's Federal, State or Local Permit Number(s) applicable to this facility's sewage sludge:

If the contractor is responsible for the use and/or disposal of the sewage sludge, provide a description of the service to be provided to the applicant and the respective obligations of the applicant and the contractor(s).

8. **Pollutant Concentrations.** Using the table below or a separate attachment, provide sewage sludge monitoring data for the pollutants which limits in sewage sludge have been established in 9 VAC 25-31-10 et seq. for this facility's expected use or disposal practices. All data must be based on three or more samples taken at least one month apart and must be no more than four and one-half years old.

POLLUTANT	CONCENTRATION (mg/kg dry weight)	SAMPLE DATE	ANALYTICAL METHOD	DETECTION LEVEL FOR ANALYSIS
Arsenic				
Cadmium				
Chromium				
Copper				
Lead				
Mercury				
Molybdenum				
Nickel				
Selenium				
Zinc				

FACILITY NAME: Lake Anna Env. Ser. STP

VPDES PERMIT NUMBER: VA0072079

9. Certification. Read and submit the following certification statement with this application. Refer to the instructions to determine who is an officer for purposes of this certification. Indicate which parts of the application you have completed and are submitting:

X Section A (General Information)

X Section B (Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge)

       Section C (Land Application of Bulk Sewage Sludge)

       Section D (Surface Disposal)

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Name and official title Jeffrey A. Snyder, President

Signature Jeffrey A. Snyder Date Signed 4/15/2011

Telephone number ( 540 ) 894-8304

Upon request of the department, you must submit any other information necessary to assess sewage sludge use or disposal practices at your facility or identify appropriate permitting requirements.

**SECTION B. GENERATION OF SEWAGE SLUDGE OR PREPARATION  
OF A MATERIAL DERIVED FROM SEWAGE SLUDGE**

*Complete this section if your facility generates sewage sludge or derives a material from sewage sludge*

**1. Amount Generated On Site.**

Total dry metric tons per 365-day period generated at your facility: 0.2 dry metric tons

**2. Amount Received from Off Site.** If your facility receives sewage sludge from another facility for treatment, use or disposal, provide the following information for each facility from which sewage sludge is received. If you receive sewage sludge from more than one facility, attach additional pages as necessary.

- a. Facility name: \_\_\_\_\_
- b. Contact Person: \_\_\_\_\_  
Title: \_\_\_\_\_  
Phone: ( \_\_\_\_\_ ) \_\_\_\_\_
- c. Mailing address: \_\_\_\_\_  
Street or P.O. Box: \_\_\_\_\_  
City or Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_
- d. Facility location: \_\_\_\_\_  
(not P.O. Box) \_\_\_\_\_
- e. Total dry metric tons per 365-day period received from this facility: \_\_\_\_\_ dry metric tons
- f. Describe, on this form or on another sheet of paper, any treatment processes known to occur at the off-site facility, including blending activities and treatment to reduce pathogens or vector attraction characteristics:  
\_\_\_\_\_  
\_\_\_\_\_

**3. Treatment Provided at Your Facility.**

- a. Which class of pathogen reduction is achieved for the sewage sludge at your facility?  
       Class A             Class B        X   Neither or unknown
- b. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge: Aerobic Digestion  
\_\_\_\_\_
- c. Which vector attraction reduction option is met for the sewage sludge at your facility?  
       Option 1 (Minimum 38 percent reduction in volatile solids)  
       Option 2 (Anaerobic process, with bench-scale demonstration)  
       Option 3 (Aerobic process, with bench-scale demonstration)  
       Option 4 (Specific oxygen uptake rate for aerobically digested sludge)  
       Option 5 (Aerobic processes plus raised temperature)  
       Option 6 (Raise pH to 12 and retain at 11.5)  
       Option 7 (75 percent solids with no unstabilized solids)  
       Option 8 (90 percent solids with unstabilized solids)  
  X   None or unknown
- d. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vector attraction properties of sewage sludge: Storage in enclosed tank  
\_\_\_\_\_
- e. Describe, on this form or another sheet of paper, any other sewage sludge treatment activities, including blending, not identified in a - d above: \_\_\_\_\_  
\_\_\_\_\_

**4. Preparation of Sewage Sludge Meeting Ceiling and Pollutant Concentrations, Class A Pathogen Requirements and One of Vector Attraction Reduction Options 1-8 (EQ Sludge). N/A**

*(If sewage sludge from your facility does not meet all of these criteria, skip Question 4.)*

- a. Total dry metric tons per 365-day period of sewage sludge subject to this section that is applied to the land:  
\_\_\_\_\_ dry metric tons
- b. Is sewage sludge subject to this section placed in bags or other containers for sale or give-away?  
\_\_\_\_\_ Yes \_\_\_\_\_ No

**5. Sale or Give-Away in a Bag or Other Container for Application to the Land. N/A**

*(Complete this question if you place sewage sludge in a bag or other container for sale or give-away prior to land application. Skip this question if sewage sludge is covered in Question 4.)*

- a. Total dry metric tons per 365-day period of sewage sludge placed in a bag or other container at your facility for sale or give-away for application to the land: \_\_\_\_\_ dry metric tons
- b. Attach, with this application, a copy of all labels or notices that accompany the sewage sludge being sold or given away in a bag or other container for application to the land.

**6. Shipment Off Site for Treatment or Blending.**

*(Complete this question if sewage sludge from your facility is sent to another facility that provides treatment or blending. This question does not apply to sewage sludge sent directly to a land application or surface disposal site. Skip this question if the sewage sludge is covered in Questions 4 or 5. If you send sewage sludge to more than one facility, attach additional sheets as necessary.)*

- a. Receiving facility name: Louisa Regional Sewage Treatment Plant
- b. Facility contact: Wes Basore  
Title: Operator  
Phone: ( 540 ) 894-3807
- c. Mailing address:  
Street or P.O. Box: P.O. Box 9  
City or Town: Louisa State: VA Zip: 23093
- d. Total dry metric tons per 365-day period of sewage sludge provided to receiving facility:  
0.2 dry metric tons
- e. List, on this form or an attachment, the receiving facility's VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the receiving facility's sewage sludge use or disposal practices:  
Permit Number: \_\_\_\_\_ Type of Permit: \_\_\_\_\_  
VA0067954 VPDES
- f. Does the receiving facility provide additional treatment to reduce pathogens in sewage sludge from your facility?  
X Yes \_\_\_\_\_ No  
Which class of pathogen reduction is achieved for the sewage sludge at the receiving facility?  
\_\_\_\_\_ Class A \_\_\_\_\_ Class B X Neither or unknown  
Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce pathogens in sewage sludge: Aerobic Digestion
- g. Does the receiving facility provide additional treatment to reduce vector attraction characteristics of the sewage sludge? X Yes \_\_\_\_\_ No  
Which vector attraction reduction option is met for the sewage sludge at the receiving facility?  
\_\_\_\_\_ Option 1 (Minimum 38 percent reduction in volatile solids)  
\_\_\_\_\_ Option 2 (Anaerobic process, with bench-scale demonstration)

FACILITY NAME: Lake Anna Env. Ser. STP

VPDES PERMIT NUMBER: VA0072079

- ☐ Option 3 (Aerobic process, with bench-scale demonstration)  
☐ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)  
☐ Option 5 (Aerobic processes plus raised temperature)  
☐ Option 6 (Raise pH to 12 and retain at 11.5)  
☐ Option 7 (75 percent solids with no unstabilized solids)  
☐ Option 8 (90 percent solids with unstabilized solids)  
☒ None unknown

Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce vector attraction properties of sewage sludge: Aerobic Digestion

- h. Does the receiving facility provide any additional treatment or blending not identified in f or g above?

☐ Yes ☒ No

If "Yes", describe, on this form or another sheet of paper, the treatment processes not identified in f or g above:

- i. If you answered "Yes" to f, g or h above, attach a copy of any information you provide to the receiving facility to comply with the "notice and necessary information" requirement of 9 VAC 25-31-530.G.  
j. Does the receiving facility place sewage sludge from your facility in a bag or other container for sale or give-away for application to the land? ☐ Yes ☒ No

If "Yes", provide a copy of all labels or notices that accompany the product being sold or given away.

- k. Will the sewage sludge be transported to the receiving facility in a truck-mounted watertight tank normally used for such purposes? ☒ Yes ☐ No. If "No", provide description and specification on the vehicle used to transport the sewage sludge to the receiving facility.

Show the haul route(s) on a location map or briefly describe the haul route below and indicate the days of the week and the times of the day sewage sludge will be transported. Attachment Three

**7. Land Application of Bulk Sewage Sludge.**

*(Complete Question 7.a if sewage sludge from your facility is applied to the land, unless the sewage sludge is covered in Questions 4, 5 or 6. Complete Question 7.b, c & d only if you are responsible for land application of sewage sludge.)*

- a. Total dry metric tons per 365-day period of sewage sludge applied to all land application sites:

                     dry metric tons

- b. Do you identify all land application sites in Section C of this application? ☐ Yes ☐ No

If "No", submit a copy of the Land Application Plan (LAP) with this application (LAP should be prepared in accordance with the instructions).

- c. Are any land application sites located in States other than Virginia? ☐ Yes ☐ No

If "Yes", describe, on this form or on another sheet of paper, how you notify the permitting authority for the States where the land application sites are located. Provide a copy of the notification.

- d. Attach a copy of any information you provide to the owner or lease holder of the land application sites to comply with the "notice and necessary" information requirement of 9 VAC 25-31-530 F and/or H (Examples may be obtained in Appendix IV).

**8. Surface Disposal.**

*(Complete Question 8 if sewage sludge from your facility is placed on a surface disposal site.)*

- a. Total dry metric tons per 365-day period of sewage sludge from your facility placed on all surface disposal sites: \_\_\_\_\_ dry metric tons

- b. Do you own or operate all surface disposal sites to which you send sewage sludge for disposal?  
\_\_\_\_ Yes \_\_\_\_ No

If "No", answer questions c - g for each surface disposal site that you do not own or operate. If you send sewage sludge to more than one surface disposal site, attach additional pages as necessary.

- c. Site name or number: \_\_\_\_\_

- d. Contact person: \_\_\_\_\_

Title: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

Contact is: \_\_\_\_ Site Owner \_\_\_\_ Site operator

- e. Mailing address:

Street or P.O. Box: \_\_\_\_\_

City or Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

- f. Total dry metric tons per 365-day period of sewage sludge from your facility placed on this surface disposal site: \_\_\_\_\_ dry metric tons

- g. List, on this form or an attachment, the surface disposal site VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the sewage sludge use or disposal practices at the surface disposal site:

Permit Number: \_\_\_\_\_ Type of Permit: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**9. Incineration.**

*(Complete Question 9 if sewage sludge from your facility is fired in a sewage sludge incinerator.)*

- a. Total dry metric tons per 365-day period of sewage sludge from your facility fired in a sewage sludge incinerator: \_\_\_\_\_ dry metric tons

- b. Do you own or operate all sewage sludge incinerators in which sewage sludge from your facility is fired?  
\_\_\_\_ Yes \_\_\_\_ No

If "No", answer questions c - g for each sewage sludge incinerator that you do not own or operate. If you send sewage sludge to more than one sewage sludge incinerator, attach additional pages as necessary.

- c. Incinerator name or number: \_\_\_\_\_

- d. Contact person: \_\_\_\_\_

Title: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

Contact is: \_\_\_\_ Incinerator Owner \_\_\_\_ Incinerator Operator

- e. Mailing address:

Street or P.O. Box: \_\_\_\_\_

City or Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

- f. Total dry metric tons per 365-day period of sewage sludge from your facility fired in this sewage sludge incinerator: \_\_\_\_\_ dry metric tons

- g. List on this form or an attachment the numbers of all other federal, state or local permits that regulate the firing

FACILITY NAME: Lake Anna Env. Ser. STP

VPDES PERMIT NUMBER: VA0072079

of sewage sludge at this incinerator:

Permit Number:

Type of Permit:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**10. Disposal in a Municipal Solid Waste Landfill.**

*(Complete Question 10 if sewage sludge from your facility is placed on a municipal solid waste landfill. Provide the following information for each municipal solid waste landfill on which sewage sludge from your facility is placed. If sewage sludge is placed on more than one municipal solid waste landfill, attach additional pages as necessary.)*

a. Landfill name: \_\_\_\_\_

b. Contact person: \_\_\_\_\_

Title: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

Contact is: \_\_\_\_\_ Landfill Owner \_\_\_\_\_ Landfill Operator

c. Mailing address:

Street or P.O. Box: \_\_\_\_\_

City or Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

d. Landfill location.

Street or Route #: \_\_\_\_\_

County: \_\_\_\_\_

City or Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

e. Total dry metric tons per 365-day period of sewage sludge placed in this municipal solid waste landfill:

\_\_\_\_\_ dry metric tons

f. List, on this form or an attachment, the numbers of all federal, state or local permits that regulate the operation of this municipal solid waste landfill:

Permit Number:

Type of Permit:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

g. Does sewage sludge meet applicable requirements in the Virginia Solid Waste Management Regulation, 9 VAC 20-80-10 et seq., concerning the quality of materials disposed in a municipal solid waste landfill?

\_\_\_\_\_ Yes \_\_\_\_\_ No

h. Does the municipal solid waste landfill comply with all applicable criteria set forth in the Virginia Solid Waste Management Regulation, 9 VAC 20-80-10 et seq.? \_\_\_\_\_ Yes \_\_\_\_\_ No

i. Will the vehicle bed or other container used to transport sewage sludge to the municipal solid waste landfill be watertight and covered? \_\_\_\_\_ Yes \_\_\_\_\_ No

Show the haul route(s) on a location map or briefly describe the route below and indicate the days of the week and time of the day sewage sludge will be transported. \_\_\_\_\_

\_\_\_\_\_



Google maps

**Directions to 131 Pine Ridge Dr, Louisa, VA 23093**  
**15.0 mi – about 26 mins**







Download Google Maps on your phone at [google.com/gmm](http://google.com/gmm)

[illegible]



Lake Front Dr, Mineral, VA 23117

Lake Anna Environmental Services

1. Head **west** on **Lake Front Dr** toward **VA-208 W/New Bridge Rd**  
go 0.2 mi  
total 0.2 mi
-  2. Turn right at **VA-208 W/New Bridge Rd**  
About 5 mins  
go 3.0 mi  
total 3.2 mi
-  3. Turn left at **US-522 S/VA-208 W/Zachary Taylor Hwy**  
Continue to follow US-522 S/VA-208 W  
About 9 mins  
go 5.4 mi  
total 8.6 mi
-  4. Turn right at **E 1st St**  
go 430 ft  
total 8.7 mi
-  5. Turn right at **VA-208 W/VA-22 W/Piedmont Ave**  
Continue to follow VA-208 W/VA-22 W  
About 7 mins  
go 5.2 mi  
total 13.9 mi
-  6. Turn left at **US-33 E**  
About 3 mins  
go 0.8 mi  
total 14.6 mi
-  7. Turn right at **Pine Ridge Dr**  
*Destination will be on the right*  
About 1 min  
go 0.4 mi  
total 15.0 mi



131 Pine Ridge Dr. Louisa, VA 23093

r. Louisa Regional WWTP

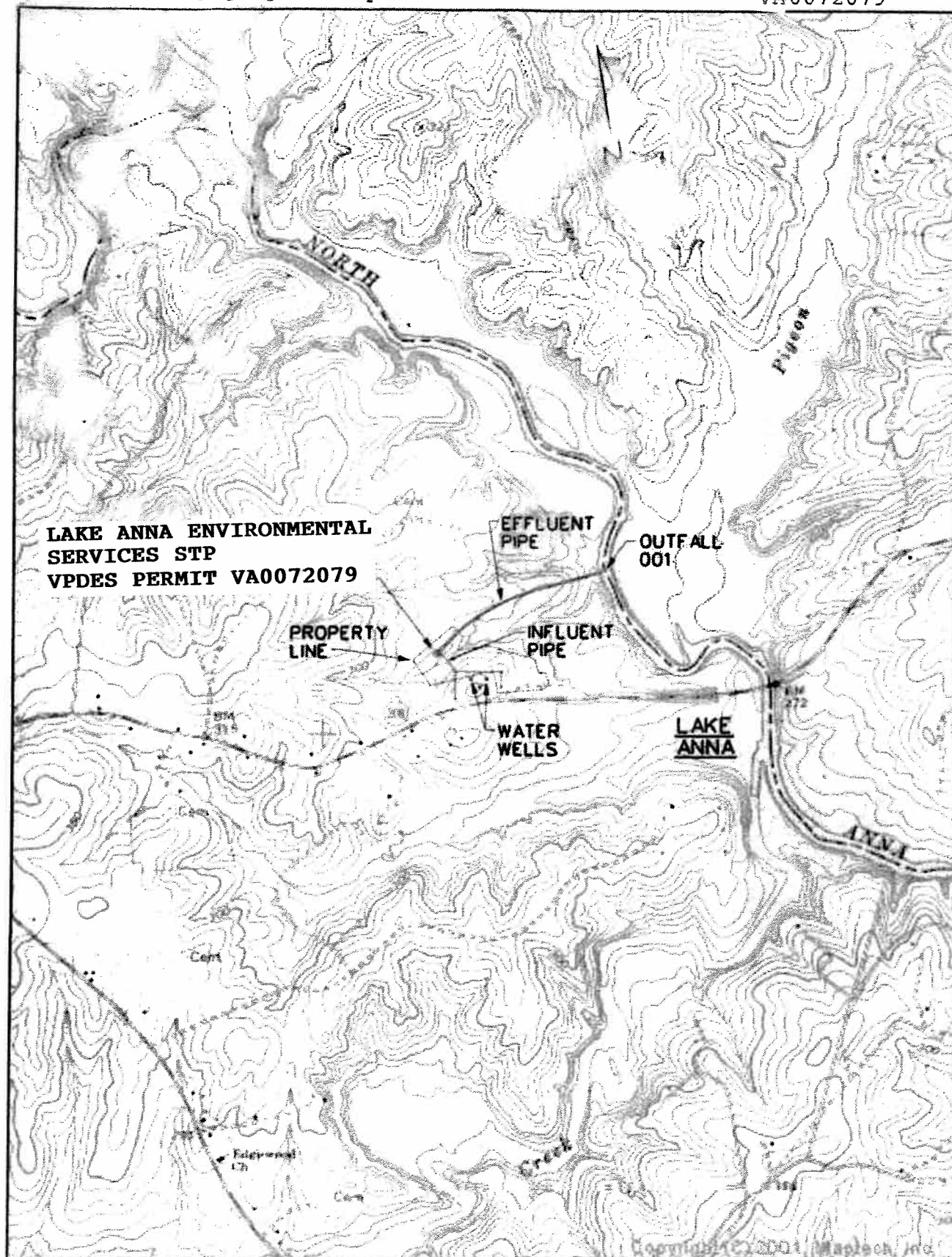
These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

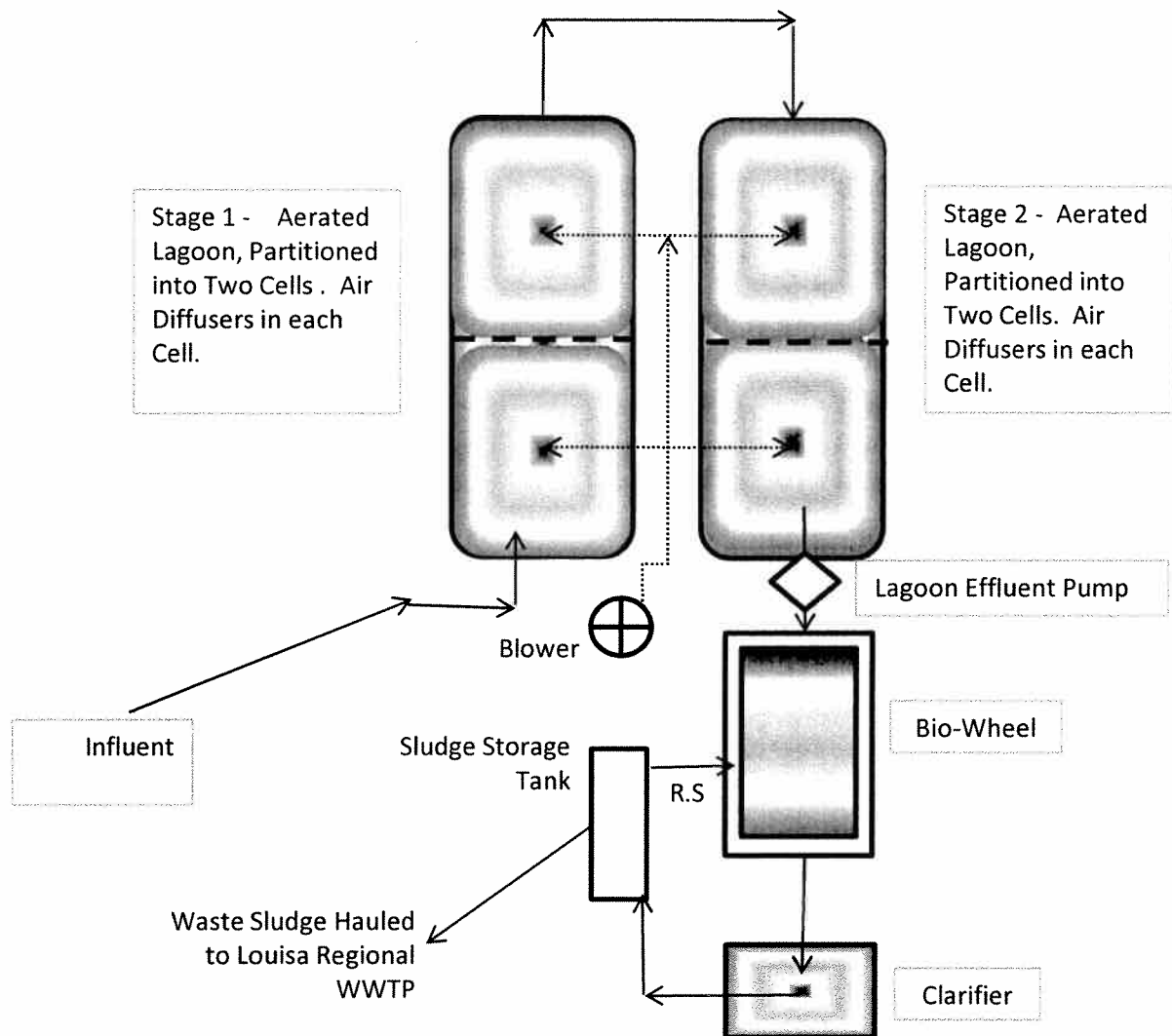
Map data ©2011 Google

Directions weren't right? Please find your route on [maps.google.com](http://maps.google.com) and click "Report a problem" at the bottom left.

Figure 1, Topographic Map

VA0072079





**Figure 2a Flow Diagram**

Lake Anna Environmental Services  
0.02 MGD Existing Plant





LOUISA COUNTY WATER AUTHORITY  
P.O. BOX 9  
23 LOUDIN LANE  
LOUISA, VIRGINIA 23093  
PHONE: (540) 967-1122  
FAX: (540) 967-0656

March 9, 2011

Inboden Environmental Services, Inc.  
5790 Main Street  
Mt. Jackson, Virginia 22842  
Attn: Arthur W. Nair, PE Engineer

RE: Lake Anna Environmental Services VA0072079

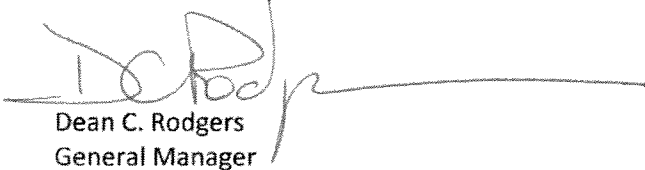
Dear Mr. Nair:

Please accept this Letter of Acceptance as approval from Louisa County Water Authority to accept gravity settled sludge from your fixed film effluent polishing unit process located at Lake Anna Plaza (VPDES Permit No. VA0072079) with the following provisions.

1. We will accept up to 5,000 gallons per year containing up to 1% solids.
2. Operators at the Louisa Regional Wastewater Treatment Plant must be notified 24 hours prior to delivery. 540-967-0696
3. The cost will be \$100/1,000 gallons delivered to the plant exclusive of the cost of hauling.
4. Inboden Environmental Services, Inc. will be billed on a monthly basis, if payment is not received within 30 days, this Letter of Acceptance will be withdrawn.
5. Louisa County Water Authority reserves the right to withdraw this Letter of Acceptance for any reason upon written notification.

If you have any questions or require additional information please feel free to contact me.

Sincerely,

  
Dean C. Rodgers  
General Manager

VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM  
GENERAL PERMIT REGISTRATION STATEMENT  
FOR TOTAL NITROGEN AND TOTAL PHOSPHORUS DISCHARGES AND NUTRIENT TRADING IN  
THE CHESAPEAKE WATERSHED IN VIRGINIA

RECEIVED  
MAY 02 2011  
DEQ-NRO

1. **APPLICANT INFORMATION**

A. Name of Facility: Lake Anna Environmental Services STP

B. Facility Owner: Lake Anna Environmental Services

C. Owner's Mailing Address

a. Street or P.O. Box 200 Lake Front Dr., Suite 103

b. City or Town Lake Anna c. State VA d. Zip Code 23117

e. Phone Number 540 894-8304 f. Fax Number 540 894-8305

g. E-mail address propstb@live.com

D. Facility Location: Lake Front Dr. 600 ft. north of intersection of Rt. 208  
Street No., Route No., or Other Identifier  
Louisa County, VA  
County

E. Is the operator of the facility also the owner? ☒ Yes \_\_\_ No \_\_\_  
If No, complete F. & G.

F. Name of Operator: \_\_\_\_\_

G. Operator's Mailing Address

a. Street or P.O. Box \_\_\_\_\_

b. City or Town \_\_\_\_\_ c. State \_\_\_ d. Zip Code \_\_\_\_\_

e. Phone Number \_\_\_\_\_ f. Fax Number \_\_\_\_\_

g. E-mail address \_\_\_\_\_

2. **FACILITY INFORMATION**

Does this facility currently have a VPDES permit? Yes ☒ No \_\_\_

If no, has a permit been applied for? Yes \_\_\_ No \_\_\_

If yes to either of the above questions, provide permit number. VA0072079

3. **AGGREGATED DISCHARGES**

If the owner or operator listed above desires to aggregate the facility's mass load limits for total nitrogen and total phosphorus with other permitted facilities under common ownership or operation in the same tributary, list all affected facilities and the VPDES permit numbers assigned to these facilities.

Facility Name  
LAKE ANNA ENVIRONMENTAL SERVICES STP  
Not Aggregated

VPDES permit number  
VA0072079

4. **TRANSFER OF ALLOCATION TO OR FROM ANOTHER FACILITY**

If the owner or operator listed above proposes the exchange of an allocation for total nitrogen or total phosphorus with other permitted facilities, list all affected facilities, the VPDES permit numbers assigned to these facilities, the delivered pounds of total nitrogen or total phosphorus proposed for exchange and the calendar years for which the exchange will be in effect.

Facility	VPDES#	N/P	Delivered pounds	Acquired/transferred?	Calendar years?
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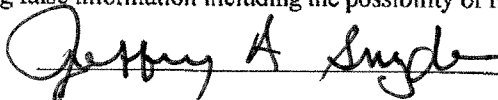
No Transfers

Attach a copy of the applicable contract documentation related to the execution of these allocations.

5. **CERTIFICATION:**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

Signature

 Date: 4/15/2011

Name of person(s) signing above: Jeffrey A. Snyder  
(printed or typed)

Title(s): President

**REQUIRED ATTACHMENT FOR NEW AND EXPANDED FACILITIES**

Plan to offset new or increased delivered total nitrogen and delivered total phosphorus loads

**For Department Use Only:**

Accepted/Not Accepted by: \_\_\_\_\_ Date: \_\_\_\_\_



**Lake Anna Environmental Services  
VA0072079**

**Nutrient Offset Plan**

Lake Anna Environmental Services currently owns and operates a 0.02 MGD aerated lagoon discharging into Lake Anna. In March 2011, the facility submitted an application for reissuance of VPDES Permit # VA0072079. The application includes flow tiers for 0.020 MGD and 0.099 MGD.

It is understood that the current facility will not require nutrient offsets for its current permitted flow capacity of 0.020 MGD.

It is understood that upon any expansion of the current capacity the facility will require nutrient offsets so that current effluent nutrient levels (at plant capacity) are not exceeded.

The VPDES reissuance application indicates that with the expansion of the facility to a capacity of 0.099 MGD, facilities for the treatment and removal of nutrients will be constructed. The planned nutrient removal facilities will have the capacity to remove of additional Total Nitrogen and Total Phosphorus to achieve the current discharge loadings at the permitted capacity.

It is not anticipated that transfer of allocations between other facilities will be necessary.